REMARKS

The Applicants respectfully request reconsideration of this application in view of the above amendments and the following remarks.

35 U.S.C. §103(a) Rejection – Bennett as evidenced by Lazou

Claims 38 and 42-57 have been rejected under 35 U.S.C. §103(a) as allegedly being unpatentable over International Pub. No. WO 95/02069 issued to Bennett et al. (hereinafter "Bennett") as evidenced by *The Use of Antisense Strategy to Modulate Human Melanogenesis* by Lazou et al. (hereinafter "Lazou"). The Applicants respectfully submit that the present claims are allowable over Bennett as evidenced by Lazou.

Initially, Applicants respectfully submit that not all of what is disclosed in Bennett (WO 95/02069) is prior art to the present patent application. The present patent application claims priority to December 30, 2003. Bennett (WO 95/02069) derives priority from U.S. Patent Application Serial No. 08/199,779 filed on February 22, 1994, and the '779 application is itself a continuation-in-part (CIP) of U.S. Patent Application Serial No. 089,996, which was filed July 9, 1993.

It is well known that new subject matter may be added to a CIP application, and that such newly added subject matter is not entitled to the priority date. Accordingly, any new matter added to Bennett (WO 95/02069), which was not present in U.S. Patent Application Serial No. 089,996, should not be entitled to the July 9, 1993 priority date of the '996 patent application.

The Examiner has relied extensively upon the *claims* in Bennett (WO 95/02069) to reject the claims of the present patent application. For convenience, the Applicants address the rejection based on Bennett (WO 95/02069) including the *claims* in this response. However, in the future, the Applicants respectfully request that the Examiner either abstain from using the claims of Bennett

(WO 95/02069) in the rejections, or else show with specificity where each of these claims has unambiguous support in the '996 patent application.

U.S. Patent Application Serial No. 089,996 has granted as U.S. Patent No. 5,703,054. To avoid confusion, and since only what is disclosed in the '996 patent application may be used as prior art against the present patent application, Applicants respectfully request that the Examiner rely upon U.S. Patent No. 5,703,054 instead of Bennett (WO 95/02069) in the future.

Turning now to the present rejections:

Claim 38 recites:

"*A method of* ***depigmenting or bleaching human skin, body hair and/or hair of a head of a subject*** *to lighten a color* ***for purely cosmetic purposes*** *comprising* ***topical application to the skin, the body hair and/or the hair of the head*** *of said subject of a* ***cosmetic*** *composition comprising at least one oligonucleotide having between 7 and 25 nucleotides, capable of specifically hybridising with genes or gene products coding for* ***protein kinase C beta-1 (PKC beta-1)***".

As understood by Applicants, Bennett as evidenced by Lazou does not disclose these limitations or render them obvious. In particular, as understood by Applicants, Bennett as evidenced by Lazou does not disclose or render obvious either: (1) a method of **depigmenting or bleaching human skin, body hair and/or hair of a head of a subject** to lighten a color **for purely cosmetic purposes** comprising **topical application** of a **cosmetic** composition; or (2) **topical application to the skin, the body hair and/or the hair of the head** of a composition comprising at least one oligonucleotide capable of specifically hybridising with genes or gene products coding for **protein kinase C beta-1 (PKC beta-1)**.

Firstly, as understood by Applicants, Bennett does not disclose a method of **depigmenting or bleaching human skin, body hair and/or hair of a head of a subject** to lighten a color **for**

purely cosmetic purposes comprising **topical application** of a **cosmetic** composition. Rather, Bennett discusses administration of oligonucleotides **for the treatment and diagnosis of disease**. See e.g., the first sentence of the Abstract. Such treatment and diagnosis of disease is not application of a **cosmetic** composition **for purely cosmetic purposes**. Moreover, as the Examiner has already acknowledged, there is no disclosure in Bennett that the oligomers are capable of **depigmenting or bleaching human skin, body hair and/or hair of a head**.

Accordingly, for at least one or more of these reasons, claim 38 is believed to be allowable.

Secondly, as understood by Applicants, Bennett does not disclose **topical application to the skin, the body hair and/or the hair of the head** of a composition comprising at least one oligonucleotide capable of specifically hybridising with genes or gene products coding for **protein kinase C beta-1 (PKC beta-1)**.

As discussed in Bennett, PKC is not a single enzyme but rather a family of enzymes, with various biological properties and expression patterns. See e.g., page 3, lines 14-17 and page 4, lines 8-10. Bennett also discusses that different PKC isozymes may be involved in various disease processes. See e.g., page 4, lines 8-9. Furthermore, Bennett discusses that it is desirable to inhibit specific PKC isozymes as treatment for diseases associated with particular isozymes. See e.g., page 5, lines 7-9.

Accordingly, as understood by Applicants, it is clear from Bennett that PKC represents a complex family of isozymes and that particular PKC associated conditions are actually associated to one or more **specific** PKC isozymes. Applicants further understand it to be clear from Bennett that **an effective treatment will not be obtained using antisense oligonucleotides specifically hybridizable with any PKC isozyme, but only using antisense oligonucleotides specifically hybridizable with the adequate PKC isozyme**.

Bennett discusses using oligonucleotides to treat psoriasis and skin cancer, among other diseases. However, Bennett does not disclose that psoriasis or skin cancer are associated with **an increase of PKC beta 1 expression**.

The Examiner has relied in part on claim 90 of Bennett. However, in claim 90 using an oligonucleotide specifically hybridizable with PKC beta 1 gene or mRNA is not, even indirectly, dependent on claims 72 or 76 directed to the particular treatment of psoriasis and skin cancer. Accordingly, Applicants respectfully submit that Bennett could only be considered to disclose the use of an oligonucleotide specifically hybridizable with PKC beta 1 gene or mRNA for treating psoriasis or skin cancer if there was a teaching in Bennett that psoriasis and skin cancer are associated with an increased expression of PKC beta 1.

However, this is not the case. Concerning skin cancer, as understood by Applicants, there is no disclosure in Bennett of an association of skin cancer with an increased expression of any particular PKC isozyme. Only a reference to PKC **in general** is provided. See e.g., page 2, lines 31-33.

Concerning psoriasis, as understood by Applicants, Bennett only discusses that PKC **in general** may be implicated. See e.g., page 2 line 31 to page 3 line 14. Bennett discusses that an alteration of the ratio between PKC alpha and PKC beta has been observed in psoriatic lesions, with **a loss of PKC beta compared to normal skin**. See e.g., page 4, lines 10-15. Psoriasis is thus not associated with **an increased expression of PKC beta 1**, since only a loss of PKC beta **in general** (not PKC beta 1) is mentioned. Furthermore, since PKC beta is already **underexpressed** in psoriatic lesions (e.g., the reported **loss** of PKC beta compared to normal skin), PKC beta does not appear as a suitable target for antisense technology in the treatment of psoriasis.

Accordingly, Bennett does not disclose that psoriasis and skin cancer may be treated using an oligonucelotide specifically hybridizable with **PKC beta 1**. Furthermore, Bennett does not disclose **topical application to the skin, the body hair and/or the hair of the head** of a

composition comprising at least one oligonucleotide capable of specifically hybridising with genes or gene products coding for **protein kinase C beta-1 (PKC beta-1)**.

Accordingly, for at least one or more of these reasons, claim 38 is believed to be allowable.

Dependent claims 42-56 and 60-66 depend from claim 38, and are believed to be allowable therefor, as well as for the recitations in each of these dependent claims.

Claim 57 recites:

> "*A method for treatment of regional hyper-pigmentation by melanocyte hyperactivity such as idiopathic melasma, local hyper-pigmentation by benign melanocyte hyperactivity and proliferation such as pigmentary age spots (actinic lentigo), accidental hyper-pigmentation such as photosensitization or post-lesion healing in a subject in need thereof, comprising* ***topical application to the hyper-pigmented skin areas*** *of said subject of* ***a topical pharmaceutical composition*** *comprising at least one oligonucleotide having between 7 and 25 nucleotides, capable of specifically hybridising with genes or gene products coding for* ***protein kinase C beta-1 (PKC beta-1)***".

As understood by Applicants, Bennett as evidenced by Lazou does not disclose these limitations or render them obvious. In particular, as understood by Applicants, Bennett as evidenced by Lazou does not disclose or render obvious **topical application to the hyper-pigmented skin areas** of **a topical pharmaceutical composition** comprising at least one oligonucleotide capable of specifically hybridising with genes or gene products coding for **protein kinase C beta-1 (PKC beta-1)**, in combination with the other claim limitations.

Bennett does not disclose that psoriasis or skin cancer are associated with **an increase of PKC beta 1 expression**. Accordingly, Bennett does not disclose that psoriasis and skin cancer may be treated using an oligonucelotide specifically hybridizable with **PKC beta 1**. The discussion above is pertinent to this point.

Furthermore, Bennett does not disclose or render obvious **topical application to the hyper-pigmented skin areas** of **a topical pharmaceutical composition** comprising at least one oligonucleotide capable of specifically hybridising with genes or gene products coding for **protein kinase C beta-1 (PKC beta-1)**.

Accordingly, for at least one or more of these reasons, claim 57 is believed to be allowable.

Conclusion

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the cited art of record and are in condition for allowance. Applicants respectfully request that the rejections be withdrawn and the claims be allowed at the earliest possible date.

If there are any additional fees due in connection with the filing of this response, please charge those fees to our Deposit Account No. 02-2666. If a telephone interview would expedite the prosecution of this Application, the Examiner is invited to contact the undersigned at (310) 207-3800.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Date: 4/21/09

By: _____
Eric S. Hyman, Reg. No. 30,139

1279 Oakmead Parkway
Sunnyvale, CA 94085-4040
Telephone (408) 720-8300
Facsimile (408) 720-8383

CERTIFICATE OF TRANSMISSION

I hereby certify that this correspondence is being submitted electronically via EFS Web to the United States Patent and Trademark Office on the date shown below.

Linda Metz 4/22/09

Linda Metz